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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,710	08/22/2001	Dieter Groitzsch	22750/492	8622

7590

04/09/2003

Michael W Ferrell Esq
Ferrells PLLC
P O Box 312
Clifton, VA 20124-1706

EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 04/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/869,710	Applicant(s) GROITZSCH ET AL.	
	Examiner Ula C Ruddock	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 22 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 16-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4.5</u> | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Objections

1. Claims 16, 20, and 21 are objected to because of the following informalities: in claim 16, and 20, the term "cm2" should be written as cm^2 . In claim 21, line 6, the word "meting" has been misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 16-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16 and 20 are considered indefinite because it is unclear to the Examiner whether Applicant is claiming a scrim, a lattice, and a netting or just one of the three. It is suggested that Applicant amend the claim to read on either "a scrim" or "a lattice" or "a netting." It should be noted that the Examiner will be treating these claims as though they are drawn to just one scrim layer.

Claims 19 and 24 are considered indefinite because it is unclear to the Examiner what a "core bicomponent fiber" and a "sheath component fiber." It is suggested that Applicant amend the claim to read on a "sheath-core bicomponent fiber."

The remaining rejected claims are rejected as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16-18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keck et al. (US 4,522,863). Keck et al. disclose a soft nonwoven laminated bonded by adhesive on a reinforcing scrim (abstract). The scrim is composed of crosslaid threads having applied thereto a heat reactable plastisol adhesive (col 1, ln 60-64) which the Examiner is equating to the "bonding agent that has a hard grip" of the present invention. One or both sets of threads may contain adhesive which bonds the two sets at crossover points (col 3, ln 30-31). A tissue layer is on one side of the scrim and a layer of microfibers is on the other side of the scrim web (col 2, ln 57-60). It should be noted that both the tissue layer and the layer of microfibers are considered nonwovens. The nonwoven layers may be manufactured of synthetic thermoplastic fibers (col 4, ln 7-8). Furthermore, the laminate of Keck et al. is considered to be bulky (abstract) and lofty (col 2, ln 6) which the Examiner is equating to the repeating fold-shaped elevations and repeating wave-shaped elevations of the present invention.

Keck et al. fail to disclose that the mesh has a mesh size of 0.01 to 9 cm², that the continuous filaments are 150 to 2000 µm thick, that the filaments are not less distant from each other than 0.10 cm, and that the first thickness of the crossing points is seven times the second thickness of the crossing points.

It should be noted that mesh size, filament thickness, filament distance, and crossing point thickness are all result effective variables. For example, the thicker the filament size directly affects the strength of the mesh. The larger the mesh size directly affects the durability of the mesh. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a mesh having a mesh size of 0.01 to 9 cm², continuous filaments that are 150 to 2000 µm thick, filaments that are not less distant from each other than 0.10 cm, and a mesh wherein the first thickness of the crossing points is seven times the second thickness of the crossing points, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized these factors motivated by the desire to create a fibrous laminate with increased strength and durability.

6. Claims 19-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keck et al. (US 4,522,863), as shown above, in view of Groitzsch (US 5,733,826). Keck et al. disclose the claimed invention except for the teaching that nonwoven fabric is made up of bicomponent fibers and the method of manufacturing the fibrous web.

Groitzsch disclose an inner sole for shoes that is made of sheath-core bicomponent fibers. The insole is produced by emboss-bonding and heat forming the fabric (abstract). The formed fabric is comprised of fibers having shrinkage fibers (col 1, ln 59). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used Groitzsch's bicomponent fibers and method of making the insole on the fibrous laminate of Keck et al.,

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motivated by the desire to create a laminate with economic efficiency and that has the desirable characteristics of both sheath and core materials.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 703-305-0066. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

UCR

April 4, 2003

Ula Ruddock